

IN THE CLAIMS

Note that claims 1-43 have been canceled, without prejudice or disclaimer, and substituted with new claims 44-60.

This listing of the claims replaces all prior versions of the claims in the application.

1.-43. (canceled).

44. (New) An isolated polypeptide selected from the group consisting of:

- a) a polypeptide comprising the amino acid sequence of SEQ ID NO:3,
- b) a polypeptide comprising a naturally occurring amino acid sequence at least 90% identical to the amino acid sequence of SEQ ID NO:3, said polypeptide having cell cycle regulating activity,
- c) a polypeptide comprising a polypeptide fragment, wherein the polypeptide fragment is a fragment of the amino acid sequence of SEQ ID NO:3, said polypeptide fragment having cell cycle regulating activity, and
- d) a polypeptide comprising an immunogenic fragment, wherein the immunogenic fragment comprises at least 10 contiguous amino acid residues of the amino acid sequence of SEQ ID NO:3.

45. (New) An isolated polypeptide of claim 44, comprising the amino acid sequence of SEQ ID NO:3.

46. (New) An isolated polynucleotide encoding a polypeptide of claim 44.

47. (New) An isolated polynucleotide encoding a polypeptide of claim 45.

48. (New) An isolated polynucleotide of claim 47 having the sequence of SEQ ID NO:8.

49. (New) A recombinant polynucleotide comprising a promoter sequence operably linked to a polynucleotide of claim 44.

50. (New) A cell transformed with a recombinant polynucleotide of claim 36.

51. (New) An isolated polynucleotide selected from the group consisting of:

- a) a polynucleotide comprising the polynucleotide sequence of SEQ ID NO:8,
- b) a polynucleotide comprising a naturally occurring polynucleotide sequence at least 90% identical to the polynucleotide sequence of SEQ ID NO:8 encoding a polypeptide having cell cycle regulating activity,
- c) a polynucleotide comprising a polynucleotide sequence encoding a polypeptide fragment of SEQ ID NO:3 having cell cycle regulating activity,
- d) a polynucleotide complementary to the polynucleotide of a),
- e) a polynucleotide complementary to the polynucleotide of b), and
- f) a polynucleotide complementary to the polynucleotide of c), and
- g) an RNA equivalent of a)-f).

52. (New) A method for detecting a target polynucleotide in a sample, the target polynucleotide having a sequence of a polynucleotide of claim 51, the method comprising:

- a) hybridizing the sample with a probe comprising at least 20 contiguous nucleotides comprising a sequence complementary to the target polynucleotide in the sample, and which probe specifically hybridizes to the target polynucleotide, under conditions whereby a hybridization complex is formed between the probe and the target polynucleotide; and
- b) detecting the presence of the hybridization complex, wherein the presence of the hybridization complex correlates with the presence of the target polynucleotide in the sample.

53. (New) A method of detecting a target polynucleotide in a sample, the target polynucleotide having a sequence of a polynucleotide of claim 51, the method comprising:

- a) amplifying the target polynucleotide thereof using polymerase chain reaction amplification, and
- b) detecting the presence or absence of the amplified target polynucleotide, and, optionally, if present, the amount thereof.

54. (New) A method for producing a polypeptide encoded by a polynucleotide of claim 51, the method comprising:

- a) culturing a cell under conditions suitable for expression of the polypeptide, wherein the cell is transformed with a recombinant polynucleotide, and the recombinant polynucleotide comprises a promoter sequence operably linked to a polynucleotide of claim 51; and
- b) recovering the polypeptide so expressed.

55. (New) A method of screening a compound for effectiveness in altering expression of a target polynucleotide, wherein the target polynucleotide comprises a sequence of claim 51, the method comprising:

- a) exposing a sample comprising the target polynucleotide to a compound, under conditions suitable for the expression of the target polynucleotide,
- b) detecting altered expression of the target polynucleotide, and
- c) comparing the expression of the target polynucleotide in the presence of varying amounts of the compound and in the absence of the compound.

56. (New) A method of assessing toxicity of a test compound, the method comprising:

- a) treating a biological sample containing nucleic acids with the test compound,
- b) hybridizing the nucleic acids of the treated biological sample with a probe comprising at least 20 contiguous nucleotides of a polynucleotide of claim 51 under conditions whereby a specific hybridization complex is formed between the probe and a target polynucleotide in the biological sample, the target polynucleotide comprising a polynucleotide sequence of a polynucleotide of claim 51,
- c) quantifying the amount of hybridization complex, and
- d) comparing the amount of hybridization complex in the treated biological sample with the amount of hybridization complex in an untreated biological sample, wherein a difference in the amount of hybridization complex in the treated biological sample indicates potential toxicity of the test compound.

57. (New) A method of screening for a compound that modulates the activity of the polypeptide of claim 44, the method comprising:

- a) combining the polypeptide of claim 44 with at least one test compound under conditions permissive for the activity of the polypeptide of claim 44,
- b) assessing the activity of the polypeptide of claim 44 in the presence of the test compound, and
- c) comparing the activity of the polypeptide of claim 44 in the presence of the test compound with the activity of the polypeptide of claim 44 in the absence of the test compound, wherein a change in the activity of the polypeptide of claim 44 in the presence of the test compound is indicative of a compound that modulates the activity of the polypeptide of claim 44.

58. (New) A composition comprising a polypeptide of claim 44 and a pharmaceutically acceptable excipient.

59. (New) A composition of claim 58, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO:3.

60. (New) A method of screening for a compound that specifically binds to the polypeptide of claim 44, the method comprising:

- a) combining the polypeptide of claim 44 with at least one test compound under suitable conditions, and
- b) detecting binding of the polypeptide of claim 44 to the test compound, thereby identifying a compound that specifically binds to the polypeptide of claim 44.